

IN THE CLAIMS

Please amend Claims 1 and 6 and add Claims 10-20 as follows:

1. (Currently Amended) In a passive optical network that includes an optical line terminal (OLT) and a plurality of optical network units (ONUs), a method for registration of multiple entities belonging to a specific ONU comprising the steps of:

a. checking, by the OLT, if a registration request message received from the specific ONU belongs to a certain grant; and

b. based on said checking, deciding, by the OLT, to register an entity selected from the group consisting of a user, a group of users and a service and associated with the registration request as either a first entity or an additional entity of said specific ONU, the decision to register including providing a specific LLID to each entity of said specific ONU.

2. (Original) The method of claim 1, wherein said certain grant is selected from the group consisting of a discovery grant and a normal grant.

3. (Original) The method of claim 2, wherein said step of deciding includes deciding to register said entity as said additional entity if said grant is a normal grant.

4. (Original) The method of claim 2, wherein said step of deciding includes deciding to register said entity as said first entity if said grant is a discovery grant.

5. (Original) The method of claim 4, further comprising a step of deleting all previously registered entities for said specific ONU.

6. (Currently Amended) In a passive optical network that includes an optical line

terminal (OLT) and a plurality of optical network units (ONUs), a method for registration of multiple entities belonging to a specific ONU comprising the steps of:

a. checking, by the OLT, of a flags field residing inside a registration request message received from the specific ONU; and

b. based on said checking, deciding, by the OLT, to register an entity selected from the group consisting of a user, a group of users and a service and associated with the registration request as an entity of said specific ONU selected from the group consisting of a first entity and an additional entity, the decision to register including providing a specific LLID to each entity of said specific ONU.

7. (Original) The method of claim 6, wherein said step of checking includes checking if the flags field marks an additional registration.

8. (Original) The method of claim 7, wherein said mark of an additional registration includes a newly defined reserved value, and wherein said step of deciding includes concluding that said entity is said additional entity of said specific ONU.

9. (Original) The method of claim 6, wherein said step of deciding includes deciding that a flags field value is an old value, the method further comprising the step of deleting all previously registered entities for said specific ONU.

10. (NEW) The method of claim 1, wherein said registration request message is defined according to the IEEE 802.3 specification.

11. (NEW) The method of claim 6, wherein said registration request message is defined according to the IEEE 802.3 specification.

12. (NEW) A method for registration of multiple entities belonging to a specific

optical network unit (ONU) in a passive optical network that includes an optical line terminal (OLT) and a plurality of ONUs, the method comprising the steps of:

a. checking, by the OLT, if a registration request message defined according to the IEEE 802.3 specification and received from the specific ONU belongs to a certain grant; and

b. based on said checking, deciding, by the OLT, to register an entity selected from the group consisting of a user, a group of users and a service and associated with the registration request as a first entity or an additional entity of said specific ONU.

13. (NEW) The method of claim 12, wherein said step of checking includes checking of a flags field residing inside said registration request message, said flags field indicating whether said entity is said first entity or said additional entity.

14. (NEW) The method of claim 12, wherein said certain grant is selected from the group consisting of a discovery grant and a normal grant.

15. (NEW) The method of claim 14, wherein said step of deciding includes deciding to register said entity as said additional entity if said grant is a normal grant.

16. (NEW) The method of claim 14, wherein said step of deciding includes deciding to register said entity as said first entity if said grant is a discovery grant.

17. (NEW) The method of claim 16, further comprising a step of deleting all previously registered entities for said specific ONU.

18. (NEW) The method of claim 12, wherein the deciding, by the OLT, to register an entity selected from the group consisting of a user, a group of users and a service and associated with the registration request as a first entity or an additional entity of said

specific ONU includes providing, by the OLT, a specific LLID to each entity of said specific ONU.

19. (NEW) In a passive optical network that includes an optical line terminal (OLT) and a plurality of optical network units (ONUs), a method for registration of multiple entities belonging to a specific ONU comprising the steps of :

- a) checking, by the OLT, if a registration request message received from the specific ONU belongs to a certain grant; and

- b) based on said checking, deciding, by the OLT, to register an entity associated with the registration request as an entity of said specific ONU selected from the group consisting of a first entity and an additional entity; and

- c) deleting all previously registered entities for said specific ONU.

20. (NEW) In a passive optical network that includes an optical line terminal (OLT) and a plurality of optical network units (ONUs), a method for registration of multiple entities belonging to a specific ONU comprising the steps of :

- a) checking, by the OLT, of a flags field residing inside a registration request message received from the specific ONU; and

- b) based on said checking, deciding, by the OLT, to register an entity associated with the registration request as an entity of said specific ONU selected from the group consisting of a first entity and an additional entity, wherein said step of deciding includes deciding that a flags field value is an old value; and

- c) deleting all previously registered entities for said specific ONU.